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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,652	12/13/2001	Taeyoun Kwon	671-10 (P9936)	2016
28249	7590	08/28/2006		
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			EXAMINER BHATTACHARYA, SAM	
			ART UNIT 2617	PAPER NUMBER

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,652

Applicant(s)

KWON, TAEYOUN

Examiner

Sam Bhattacharya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 and 15-20 is/are allowed.
- 6) ☐ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 and 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costello et al. (US 6,754,894) in view of Brown, III et al. (US 6,038,636).

Regarding claim 1, Costello et al. discloses a mobile communication device that includes a flash memory 512 for storing program data and user data, an interface circuit over which data is copied from the flash memory, a first memory 508 for providing an operation area to store and execute the copied program data from the flash memory, and a second memory 510 for storing data generated during the execution of the program data, wherein the first and second memories are independent memories. See FIG. 5, col. 6, lines 5-22, lines 44-67, and col. 7, lines 24-34.

Costello et al. fails to disclose copying program data stored in the flash memory according to whether data stored in the flash memory is valid.

In an analogous art, Brown, III et al. disclose a method of reclaiming and defragmenting a flash memory device in which data is copied from the flash memory to another memory based on whether it is valid. See col. 3, lines 28-49. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Costello et al. by incorporating these teachings of Brown, III et al. for the purpose of restoring only valid files to the flash memory in their original format.

Regarding claim 2, Costello et al. discloses a flash memory that is a NAND-type flash memory. See col. 6, line 32.

3. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costello et al. in view of Brown, III et al. and Niiyama et al. (US 5,400,389).

Regarding claim 3, Costello et al. discloses that the first memory 508 and the second memory 510 are NOR flash and RAM memories, respectively. However, the combination of Costello et al. and Brown, III et al. fails to disclose both first and second memories that are RAM memories.

Niiyama et al. discloses a mobile communication device that includes a microprocessor 501, a ROM 502 (which can be a flash ROM), and first and second RAMs 503 and 504. The microprocessor controls the operations of the RAMs according to an operation program stored in the flash ROM. See FIG. 4 and col. 5, line 62 - col. 6, line 29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Costello et al. and Brown, III et al. by using first and second RAM memories as taught by Niiyama et al. to attain faster speeds of access and execution for data and programs stored in the memories.

Regarding claim 5, Niiyama et al. discloses mobile communication device that includes an interface circuit 506 that generates a chip enable signal enabling the flash ROM 502. See col. 6, lines 11-18. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication device of Costello et al. and Brown, III et al. by sending a chip enable signal from the interface circuit to the flash memory as taught by Niiyama et al. to activate the flash memory in association with an address supplied from the microprocessor.

Allowable Subject Matter

4. Claims 11-13 and 16-20 are allowed.
5. Claims 4 and 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: the claims are objected to or allowed for the reasons stated in a previous Office action.

Response to Arguments

7. Applicant's arguments filed on 5/19/06 have been fully considered but they are not persuasive.

Applicant states that Brown fails to disclose copying data from a flash memory to a RAM.

Examiner respectfully disagrees, and points out that Brown does disclose copying data from a flash memory 20 to a RAM 24 based on the validity of the data. See FIG. 1, col. 6, lines 30-37, col. 9, lines 45-58, and col. 11, lines 43-57.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917. The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb



GEORGE ENG
SUPERVISORY PATENT EXAMINER